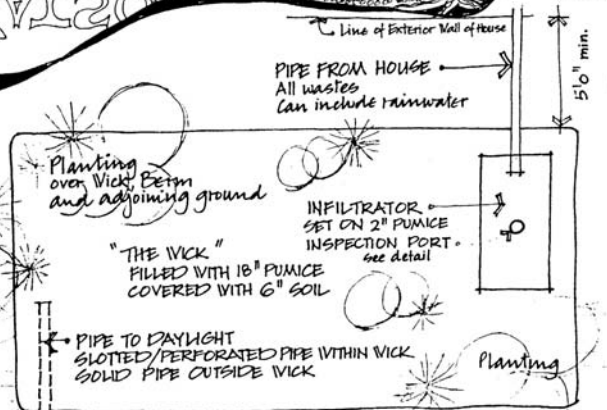


THE WATSON WICK



↑ FALL
EARTH BERMED FROM CUT AND FILL EXCAVATION FALLS TO DIRECT SURFACE WATER ONTO WICK

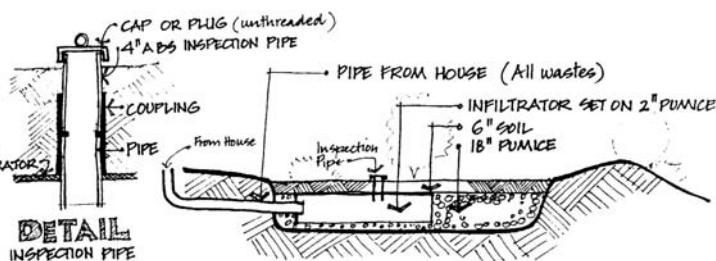
PLAN SCALE: 1/4" TO 1'0"

EXPLANATION: AN 18" BED OF PUMICE IS LAID WITH A COVERING LAYER OF SOIL. GRASS AND PLANTS ARE PLANTED AND ROOTS GROW INTO THE PUMICE BED.

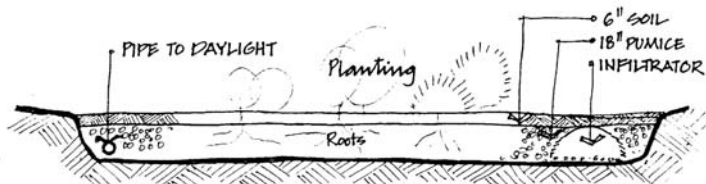
ALL HOUSEHOLD WASTES DRAIN INTO AN INFILTRATOR WHICH CAPTURES SOLID WASTE TO FORM A COMPOST AND ALLOWS LIQUID TO BE ABSORBED INTO THE "WICK" OF PUMICE AND PLANT ROOTS WHERE IT IS TAKEN UP BY THE PLANTS WHICH USE THE NUTRIENTS AND TRANSPIRE THE WATER. IN THE CASE OF TOO MUCH LIQUID THE WICK ACTS AS A FILTER AND FILTERED WATER DRAINS OUT OF THE EXIT PIPE. THIS PREVENTS LIQUID RISING UP IN THE INFILTRATOR AND PREVENTING OXYGEN REACHING THE COMPOST

EXIT PIPE TO DAYLIGHT OR SECONDARY SITE

SCREEN ON END



CROSS SECTION



LONG SECTION

NOTES: PUMICE SIZE IS DETERMINED BY FINENESS OF PASSAGEWAYS NOT AGGREGATE SIZE eg "PIT RUN" OR "MINE RUN" PUMICE (2" TO PAN) HAS FINE AND COARSE MIXED BUT HAS THE SAME PERMEABILITY AS "BLOCK MIX" (1/4" TO PAN). IF PUMICE OR OTHER VOLCANIC AGGREGATES ARE NOT AVAILABLE, BUILDERS' SAND (1/4" DOWN) COULD BE USED.

TOP SOIL SHOULD BE PILED SEPARATELY DURING EXCAVATION AND USED AS COVER FOR THE WICK. USE THE SUBSOIL FOR THE BERM. THERE IS NO NEED TO HAUL AWAY EXCAVATED MATERIAL:— USE IT! IF YOUR SITE HAS NO SOIL (eg BEDROCK CONDITION) THEN DIRT CAN BE IMPORTED AND USED WITH RETAINING WALL. IF SOIL UNDER WICK IS PARTICULARLY COARSE SAND OR GRAVEL THEN A LAYER OF STRAW AND MANURE CAN BE LAID TO HELP ANAEROBIC BACTERIA START A "CLOGGING LAYER".

INFILTRATORS AND OTHER PLASTIC DEVICES ARE COMMONLY AVAILABLE. IF UNOBTAINABLE A CYLINDER OF STACKED BRICKS OR STACKED TIRES MAY BE USED AS A COMPOSTING CHAMBER TO ALLOW LIQUID TO ESCAPE BUT PREVENT DIRT OR PUMICE ENTERING CHANNEL.

PLANTS: PERENNIALS ARE BEST BECAUSE OF PERMANENT ROOTS. LAWNS, SHADE TREES, FRUIT TREES, BERRIES, GRAPE ARBORS ETC. ALL ARE SUITABLE (NO DISEASE VECTORS via ROOTS)

SUCCESS IN BUILDING WICKS COMES WITH PRACTICE. THIS INFORMATION DOES NOT GUARANTEE SUCCESS THE FIRST TIME THEREFORE CONSTRUCTION SUPERVISION INCLUDING SITE AND SOIL ANALYSIS CAN BE ARRANGED BY TOM WATSON, P.O. BOX 8, EMBUDO, NM 87531 OR (505) 579.4001